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# Public Health Reports

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The Physically Handicapped



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# Public Health Reports

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## THE PHYSICALLY HANDICAPPED<sup>1</sup>

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### I.

The war and the resulting need for manpower have brought a markedly increasing appreciation of the problem of physically handicapped persons, from the point of view of both military service and the labor force. Among the physically handicapped persons, the blind and the deaf and those who have an orthopedic impairment, the latter constitute a major part of the problem, at least quantitatively. This paper deals principally with this particular group.<sup>3</sup>

While primary attention has been given to the physically handicapped among the younger age groups,<sup>4</sup> and likewise to workers impaired by industrial injuries,<sup>5</sup> no comprehensive data have been available for the population as a whole. Contemporary discussions of the problem on a national basis have been relying mainly on preliminary data from the National Health Survey (23).<sup>6</sup> However, the preliminary report on persons with orthopedic impairments was based on 8 cities out of the 83 surveyed by the National Health Survey (28). The present paper utilizes the data from the entire Survey, which permit a somewhat wider analysis and add to the reliability of the results.

Being a house-to-house canvass, the National Health Survey<sup>7</sup> was naturally subjected to the shortcomings characteristic of such surveys. As a precaution, it seems desirable to state some of these

<sup>1</sup> From the Division of Public Health Methods, National Institute of Health. Assistance in the preparation of these materials was furnished by the personnel of Work Projects Administration. (Official Projects Nos. 712159-658/9999 and 765-23-3-10.)

<sup>2</sup> At present First Lieutenant in the Army of the United States, Office of the Surgeon General.

<sup>3</sup> See Britten (6) for a study of the blind, and Beasley (8) for a study of the deaf. Combined estimates of the blind, the deaf, and persons with orthopedic impairments in the United States are presented in section II (table 11).

<sup>4</sup> See Gooch (11), Baker (3), and Hood (13) on crippled children; also Holland (19) on the disabling diseases of childhood. Holland's study is based on Health Survey data. (For a complete list of Health Survey studies, see reference 24.)

<sup>5</sup> See Kossoris and Kjaer (10).

<sup>6</sup> See Walter (34), Lynch (22), Amato (1), Bureau of Employment Service (9), and others. Of the older studies, those by Sydenstricker and Britten (32 and 33) are well known. The latter studies were based on white males, holders of life insurance policies.

<sup>7</sup> For a complete discussion of the scope and method of the Survey, see (28). It might be mentioned here briefly that the Health Survey was carried out in winter, 1935-36. The information was gathered by trained enumerators, in making usually a single visit to each household. The surveyed urban population, on which this study is based, totalled 2.5 million persons.

shortcomings at the very outset. For one thing, the housewife, who was usually the informant, could hardly be expected to have been cognizant of all defects of the members of the family, especially such defects of which the afflicted themselves have been hardly conscious. For another thing—and what may be more important—the informant could have deliberately concealed the defects, and it does not matter (with respect to the effect on the data) whether such deliberate action is rooted in a traditionally misguided philosophy of concealing deformities or whether it springs from economic reasons.<sup>8</sup> Due to these and other <sup>9</sup> factors, the results presented here should be considered as minimum estimates.

#### EXTENT OF THE PROBLEM

In securing information on this problem one might commonly center his attention first on its quantitative aspects: (a) The approximate number of persons in the United States who have orthopedic impairments, the distribution of these persons by age and sex, and the extent of disability from their impairments, and (b) the number of persons in the United States who might be expected to acquire new orthopedic impairments each year, and the distribution of these persons by age, sex, and disability from the impairments. In other words: (a) What is the prevalence of orthopedic impairments in the United States by age, sex, and disability, and (b) what is the yearly expected incidence of new cases of these impairments by age, sex, and disability? Prior to answering these questions, the definitions of an orthopedic impairment and disability will be stated.

As defined for the Survey, an orthopedic impairment is a permanent handicap which has been depriving the afflicted person of the natural use of some portion of his skeletal system. The term "skeletal" has reference to the tissues of the bones, joints, and the neuromuscular mechanisms concerned with the function of the tissues.<sup>10</sup> In detail it refers to lost, crippled, paralyzed, or deformed individual members of the body, or whole parts of the body.<sup>11</sup> This functional deprivation could be either total, as a result of amputation, or congenital absence of a member of the body, or because of complete paralysis; or it could be partial due to congenital deformity, or weakening of the neuromuscular mechanisms. The person's ability to carry on his usual activities depends of course upon the nature of the impairment.

Like illnesses, orthopedic impairments were therefore classified by disability. A disabling impairment would thus relate to an impairment which has kept the person from his work, school, domestic

<sup>8</sup> See Collins (10) for a general discussion of various types of surveys and their limitations; also Kessler (15).

<sup>9</sup> See Lienau (21) on the effects of personnel factors on the Survey.

<sup>10</sup> See Osgood (27).

<sup>11</sup> These impairments were recorded in detail on the schedule of the Survey, section 47. (See reference 14 or 28.)

duties, or other usual activities for at least 7 consecutive days during the Survey year. However, because of the comparatively long duration of disability associated with impairments, the term "incapacitating" is used for the sake of emphasis, instead of "disabling." An incapacitating impairment further implies that the impairment was the sole or primary cause of the disability. All remaining impairments were termed nondisabling.<sup>12</sup>

By definition, orthopedic impairments, incapacitating and nondisabling alike, once incurred stay with the afflicted individuals.<sup>13</sup> Therefore, age specific prevalence rates, which show the number of persons of a certain age having an orthopedic impairment, are cumulative. For each age group, the prevalence rate, that is, the number of cases per 100,000 persons, represents impairments of prior years plus impairments which have originated during the specified age period. For example, the prevalence rate of nondisabling impairments for males aged 20-24 (table 1) indicates that out of 100,000 persons of this age, 1,462 persons have acquired during their lifetime one or more orthopedic impairments. The same table shows a corresponding rate of 1,009 per 100,000 males aged 15-19. Obviously, the difference between the two prevalence rates (1,462-1,009) gives the number of new cases that occurred among 100,000 males during the given 5-year age period. The annual incidence of new cases equals such differences divided by 5.<sup>14</sup> The prevalence rates (table 1)<sup>15</sup> and the annual incidence rates are graphically presented in figures 1 and 2, respectively—differentiated by sex and disability.<sup>16</sup>

The outstanding feature of these rates is the generally higher incidence, and therefore higher prevalence, of both incapacitating and nondisabling impairments among the male population than among the female population. In the younger age groups the higher incidence among males is presumably due to the fact that boys are generally more active than girls,<sup>17</sup> and in the following years this higher incidence is due, of course, to occupational hazards encountered by the males.

<sup>12</sup> For further details on disability, see (8) and (28).

<sup>13</sup> It might be recalled here that permanence of the handicap constituted an integral part of the definition.

<sup>14</sup> Certain assumptions are involved in such computations, as (a) continuance of prevailing incidence, (b) mortality among the handicapped persons identical with that among the total population, and (c) constant incidence within the given age groups. The assumptions are well known, and any elaboration is deemed unnecessary. (See Britten (6) for further discussion of these assumptions.)

<sup>15</sup> The rates given in the table are based on the original rates which were smoothed by means of 5-point moving least square averages (31). The original rates were derived from quinquennial age distributions of the orthopedic cases and a comparable age distribution of the Survey population. (See footnote to table 1.) In general, only one orthopedic impairment was coded for each individual. Consequently, the number of cases corresponds on the whole to the number of individuals affected. The number of cases is that found in the population on the day of the visit. Institutionalized cases, that is, persons with orthopedic impairments who were in institutions for the care of the impairment during the entire Survey year, are not included here.

<sup>16</sup> While the prevalence rates are based on 5-year age intervals (fig. 1), the incidence rates are based on 10-year age intervals (fig. 2) for the sake of smoothness.

<sup>17</sup> This fact was brought out in the study on home accidents (7).

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TABLE 1.—Age specific prevalence rates of incapacitating and nondisabling impairments among the urban population of the United States, by sex. (Based on National Health Survey data, 1935-36)<sup>1</sup>

Age groups	Number of cases per 100,000 persons			
	Incapacitating impairments		Nondisabling impairments	
	Males	Females	Males	Females
Under 5.....	60	51	253	164
5-9.....	82	82	471	346
10-14.....	94	95	684	462
15-19.....	105	99	1,009	540
20-24.....	119	105	1,462	601
25-29.....	127	112	1,909	678
30-34.....	143	120	2,339	718
35-39.....	194	127	2,904	774
40-44.....	277	128	3,396	874
45-49.....	305	169	3,755	1,072
50-54.....	479	225	4,180	1,339
55-59.....	677	319	4,849	1,740
60-64.....	949	445	5,552	2,178
65-69.....	1,244	734	6,247	2,760
70-74.....	1,554	980	6,950	3,534
75-79.....	1,911	1,391	7,659	4,308
80-84.....	2,310	1,753	8,374	4,833
85-89.....	2,751	2,122	9,096	5,189
90 and over.....	3,233	2,372	9,825	5,527

<sup>1</sup> Derived from the original quinquennial age specific rates which were smoothed by means of 5-point moving least square averages (3 $\sigma$ ). The original rates were computed from the data given in table 1 (appendix).

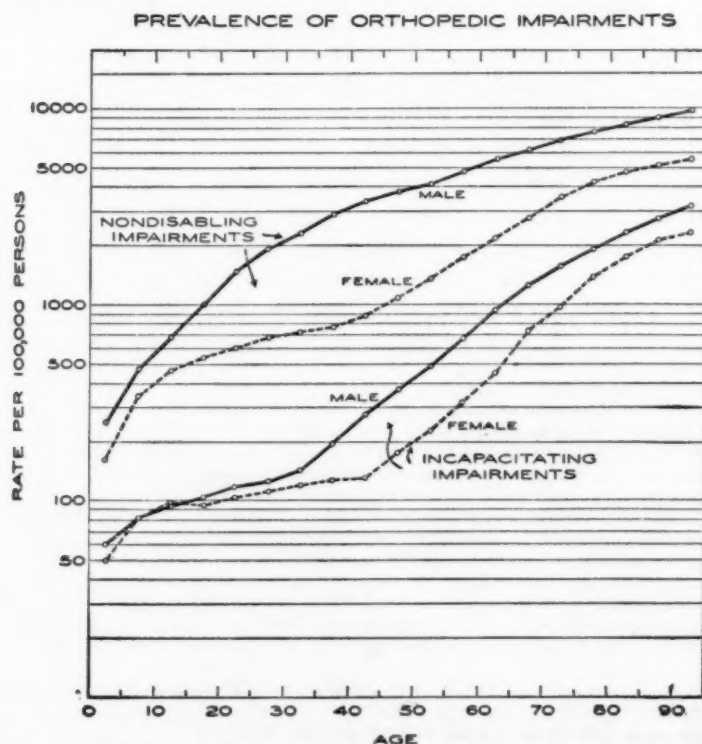


FIGURE 1.—Prevalence rates of incapacitating and nondisabling impairments among the urban population of the United States, 1935-36, by age and sex. (Based on table 1.)



The differences stand out particularly in the incidence of nondisabling impairments (fig. 2). Among females, the incidence of these impairments shows a general downward trend from childhood to age 35, and then an upward turn, due to the factor of aging. Among males the incidence exhibits a sharp rise within the 15 to 25 age period—the usual age of males for entering the labor market. There is some decline in the 35 to 45 age period, which in part might be attributed probably to the fact that for a certain proportion of the males it is the age of retirement from the labor market. There is an upward trend for males from then on—again due undoubtedly to aging. Of course, it is pos-

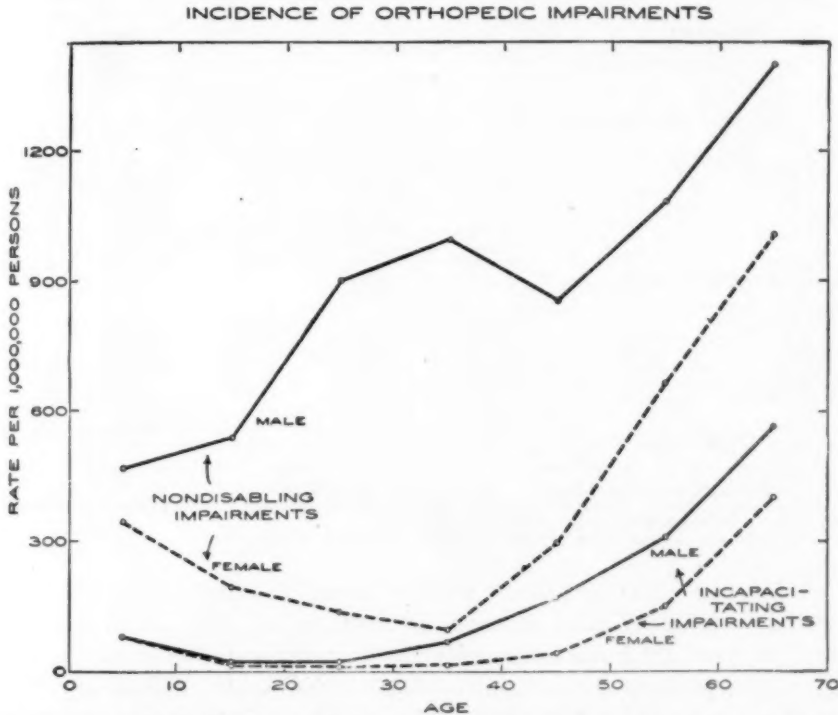


FIGURE 2.—Annual incidence rates of incapacitating and nondisabling impairments among the urban population of the United States, 1935-36, by age and sex. (Based on table 1.)

sible that the decrease in the incidence rates of impairments among males in the middle age groups might be explained by the fact that the males in the younger age groups who are more careless and prone to accidents (lack of experience might be to a large extent responsible for it) are impaired first. Such a fact would cause a subsequent drop in the incidence rates of middle age groups, until aging *per se* becomes the important factor. Only specific studies could supply the proper information for an adequate analysis of these trends in incidence.

Based on these age specific prevalence and incidence rates, two estimates were made: (a) Estimate of persons with orthopedic im-

pairments in the United States as of 1940 (table 2), and (b) expected annual number of new cases of orthopedic impairments in the United States (table 3). The United States population distributed by 5-year age groups, as given in the 1940 Census, was taken as the population base. The estimates are given separately for various age groups, for both incapacitating and nondisabling impairments.

TABLE 2.—*Estimated number of persons with orthopedic impairments among the male and female population of the United States as of 1940, classified by disability*

Age and sex	Number of persons having		Number of persons with orthopedic impairments		All impairments <sup>3</sup>
	Incapacitating impairments <sup>1</sup>	Nondisabling impairments	Disabled <sup>2</sup>	Not disabled	
	(1)	(2)	(3)	(4)	(5)
<b>Males</b>					
Under 15.....	13,200	79,700	16,900	76,000	92,900
15-24.....	13,300	145,600	17,500	141,400	158,900
25-44.....	35,600	510,100	51,600	494,100	545,700
45-64.....	76,500	594,100	102,900	567,700	670,600
65 and over.....	69,900	306,600	94,100	282,400	376,500
Total.....	208,500	1,636,100	283,000	1,561,600	1,844,600
Percent of "All impairments".....	11.3	88.7	15.3	84.7	100.0
<b>Females</b>					
Under 15.....	12,500	53,500	15,300	50,700	60,000
15-24.....	12,300	68,700	15,300	65,700	81,000
25-44.....	24,100	180,700	32,500	142,900	174,800
45-64.....	34,100	190,300	53,300	171,100	224,400
65 and over.....	49,500	163,300	72,800	140,000	212,800
Total.....	132,500	626,500	189,200	569,800	759,000
Percent of "All impairments".....	17.5	82.5	24.9	75.1	100.0

<sup>1</sup> Disability solely or primarily caused by the orthopedic impairment.

<sup>2</sup> Includes in addition to the persons shown in column 1, disabled persons with orthopedic impairments whose disability was not due to the orthopedic impairment.

<sup>3</sup> This column is the summation of columns 1 and 2, or 3 and 4.

A total of 1,844,600 males with orthopedic impairments has been estimated for the United States as of 1940 (table 2, column 5), of whom 208,500 persons have incapacitating impairments (column 1) and 1,636,100 persons have nondisabling impairments (column 2). In addition, a total of 759,000 females with such conditions has been estimated (column 5), of whom 132,500 have incapacitating impairments (column 1) and 626,500 have nondisabling impairments (column 2). The estimates postulate of course social conditions of a peacetime economy.

It might be noted that other estimates are given in table 2 (column 3) marked "Persons with orthopedic impairments—disabled." These estimates differ from those in column 1 in that they include besides persons incapacitated because of impairments persons with orthopedic impairments whose disability<sup>18</sup> was not caused by the ortho-

<sup>18</sup> The term "disability" is used here as before; it connotes disability for 7 or more consecutive days during the Survey year.



TABLE 3.—*Estimated annual number of new cases of orthopedic impairments among the male and female population in the United States as of 1940*

Age groups	Males			Females		
	Incapacitating impairments	Nondisabling impairments	Total	Incapacitating impairments	Nondisabling impairments	Total
Under 20.....	1, 160	11, 630	12, 790	1, 050	5, 920	6, 970
20-39.....	890	19, 750	20, 640	300	2, 540	2, 840
40-54.....	2, 330	10, 500	12, 830	740	4, 350	5, 090
55-64.....	2, 500	7, 400	9, 900	1, 120	4, 320	5, 440
65 and over.....	2, 850	6, 190	9, 040	2, 820	6, 020	8, 840
Total.....	9, 730	55, 530	65, 260	6, 030	23, 150	29, 180

pedic impairment. Thus, 11.3 percent of the males with orthopedic impairments are incapacitated because of the impairment, but the total number of disabled persons with orthopedic impairments constitutes 15.3 percent of all those who have an orthopedic impairment. For the females the corresponding percentages are 17.5 and 24.9. In both cases these percentages—the additional number of disabled persons due to other causes—prove the high association of orthopedic impairments with other handicaps or diseases. (See fig. 3.)

By combining the data for males and females of all ages, a total of 2,603,600 persons with orthopedic impairments is obtained for the United States as of 1940,<sup>19</sup> of whom 341,000 persons were afflicted with incapacitating impairments. The annual incidence of new cases (table 3) has been estimated as 65,260 males (9,730 incapacitated because of orthopedic impairments and 55,530 having nondisabling impairments), and 29,180 females (6,030 incapacitated by orthopedic impairments and 23,150 with nondisabling orthopedic impairments). The annual total load of new cases has thus been calculated for the United States as 94,440 persons.

As seen from table 4, the average period of disability caused by an orthopedic impairment during the year preceding the Survey was above 11 months, for all ages. The average yearly disabilities range from a minimum of 9 months for the youngest age group to about 12 months for the oldest ages—for males and females alike.<sup>20</sup> Persons with such impairments may be considered as a totally invalided group. According to above given estimates, 341,000 persons of the

<sup>19</sup> The total estimate (for all ages) given here is in close agreement with that published in the preliminary report (25). However, there is a difference in the estimate of handicapped children under 15 years of age. The preliminary report (25) estimated 210,000 handicapped children, while the present estimate is 153,900 children with orthopedic impairments (table 2, column 5). This discrepancy is explained by the fact that the preliminary report was published before the 1940 Census, consequently the exact number of children in the population was not known.

<sup>20</sup> The lower disability rates of the younger age groups might be explained by the proportionally larger number of new cases in the younger age groups originating at different dates within the year, relative to the number of prevailing (cumulative) cases. Besides, it is probably true that the handicapped persons in the younger age group could more easily adjust themselves to some occupations, thus reducing their rates of disability.

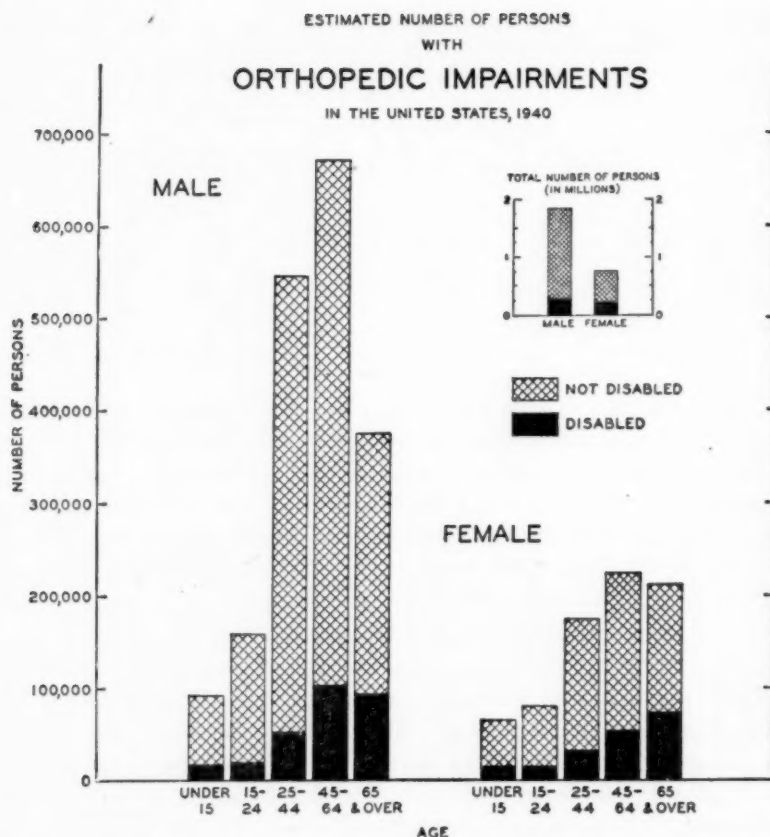


FIGURE 3.—Estimated number of persons with orthopedic impairments in the United States as of 1940, by age, sex, and disability. (Based on table 2.)

United States would be within this category of an invalid population, due to orthopedic impairments.<sup>21</sup>

Several social problems present themselves in this connection. There is (a) the combined problem of crippled children and persons of the middle age group, more generally defined as the problem of rehabilitation, and there is (b) the problem of crippled aged persons. For these reasons the data were separated here by sex, age, and by seriousness of impairment.

It is fully realized that the Survey data pertained to an urban population, and perhaps primarily to a metropolitan population. (The National Health Survey, though regionally representative of the United States as a whole, was somewhat overrepresented with large cities.)<sup>22</sup> Yet, because of general lack of such information for the

<sup>21</sup> The disability among all disabled persons with orthopedic impairments—whether the disability was caused by the impairment or by some other defect—is only slightly less than 11 months (i. e., 326 days). Therefore, all 472,200 disabled persons (table 2, column 3) might be regarded as an invalid population.

<sup>22</sup> See (28) and (14).

TABLE 4.—*Number of incapacitating orthopedic impairments and the average days of disability per incapacitating orthopedic case during the 12-month period preceding the National Health Survey, 1935-1936, by age and sex*

Age	Number of incapacitating orthopedic cases of known disability duration		Days of yearly disability per incapacitating case		
	Males	Females	Males	Females	Both sexes
Under 15.....	237	212	291	273	283
15-24.....	234	184	317	320	318
25-44.....	703	402	337	323	332
45-64.....	1,325	646	348	340	345
65 and over.....	1,125	821	353	352	353
All ages.....	3,624	2,265	342	336	339

whole country, national estimates (comprising urban and rural populations) based on these data seemed justifiable. Since these are to be taken as minimum estimates, they appear quite equitable, even if one assumes rural life to be less contributive to such impairments.<sup>23</sup>

#### EMPLOYMENT STATUS

In order to supply some measure of the extent to which the employment status<sup>24</sup> of handicapped individuals is affected by their impairments, table 5 is presented here. It is quite clear that the incapacitated persons are essentially not in the labor market. Of the incapacitated males aged 25-44 only 16.8 percent were in the labor force, comprising 8.5 percent employed and 8.3 percent on work relief or seeking work; the remainder of this group was either unemployable or stayed at home.<sup>25</sup> Of the incapacitated males aged 45-64 only 10.5 percent were in the labor force, comprising 4.5 percent employed and 6.0 percent on work relief or seeking work. Of the younger males aged 15-24 only 12.4 percent were in school as compared with 38.2 percent in school, as reported for the remaining population.<sup>26</sup>

A comparison of employment status of persons having nondisabling orthopedic impairments with the employment status of the remaining

<sup>23</sup> As a matter of fact the death rates in 1940 (based on resident deaths) from all accidents was higher in the rural areas than in the larger cities (a rate of 72.4 per 100,000 population for the rural areas, as compared with a rate of 68.0 for cities of 100,000 population and over), and was about the same in the rural areas as for the total population of the United States (72.4 as against 73.6 for the respective populations). Allocated (resident) death rates due to accidents from motor vehicles in 1940 were 25.7, 23.8, and 26.2 for the rural, metropolitan, and total United States population, respectively. (See: Vital Statistics—Special Reports, Vol. 16, Nos. 41 and 42.) To be sure, death rates depend not only upon the number of diseases or injuries but also on their severity. Yet the given rates supply some indication on the existence of about identical conditions with respect to accidents in the rural and urban areas. It should be remembered in this connection that accidents are a major cause for orthopedic impairments, as shown later. With respect to the diseases responsible for orthopedic impairments, one would hardly consider rural life as less conducive to such causes.

<sup>24</sup> Employment status was determined as on the day of the visit.

<sup>25</sup> The reader must be referred to (14) for a detailed explanation of the terms used in the employment classification.

<sup>26</sup> The term "remaining" refers to the Survey population, exclusive of the blind, the deaf, and those having orthopedic impairments, hernia, or hemorrhoids.

TABLE 5.—*Employment status of persons with orthopedic impairments compared with the employment status of the remaining population, 1935-36*

Employment status and sex	Percent distribution by employment status, age groups 15-64											
	Persons with orthopedic impairments									Remaining population <sup>1</sup>		
	Incapacitating			Nondisabling			All impairments					
	15-24	25-44	45-64	15-24	25-44	45-64	15-24	25-44	45-64	15-24	25-44	45-64
<b>Males</b>												
Employed.....	5.1	8.5	4.5	36.4	69.1	59.9	33.8	65.2	53.5	38.2	82.8	76.4
On work relief.....	0.4	0.9	0.5	4.4	10.3	9.6	4.0	9.7	8.6	3.2	6.0	6.6
Seeking work.....	5.1	7.4	5.5	23.4	15.7	19.2	21.8	15.2	17.6	19.3	10.2	13.5
In school.....	12.4	(1)	(1)	30.6	(2)	(2)	29.1	(2)	(2)	38.2	(2)	(2)
Unemployable.....	7.7	65.3	84.9	0.5	3.6	7.6	1.1	7.5	16.5	0.1	0.4	1.1
Other <sup>3</sup> .....	69.3	17.9	4.6	4.7	1.3	3.7	10.2	2.4	3.8	1.0	0.6	2.4
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Females</b>												
Employed.....	4.3	5.0	2.0	18.1	22.0	11.5	16.4	20.1	10.2	29.3	27.2	15.8
On work relief.....				1.6	2.1	1.3	1.4	1.9	1.1	0.7	0.9	0.9
Seeking work.....	5.4	2.7	1.7	13.6	6.2	3.7	12.6	5.9	3.4	12.1	3.6	2.3
In school.....	12.0	(1)	(2)	29.5	(2)	(2)	27.3	(2)	(2)	30.1	(2)	(2)
Housewife.....	2.7	35.9	48.5	21.2	59.9	71.1	19.0	57.2	67.5	20.3	63.6	72.3
Unemployable.....	9.2	20.9	19.0	0.7	1.8	2.3	1.8	3.9	4.8	0.1	0.1	0.2
Other <sup>3</sup> .....	66.4	35.5	28.8	15.3	2.0	10.1	21.5	11.0	13.0	7.4	4.6	8.5
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> "Remaining population" refers to the total urban population of the Health Survey, exclusive of persons totally or partially blind, totally or partially deaf, and persons having orthopedic impairments, hernia, or hemorrhoids.

<sup>2</sup> These persons constitute a negligible proportion of the total age group; they are included in the classification "Other."

<sup>3</sup> "Other" applies mainly to persons "at home" and "retired." It also includes persons from other classifications (like "Housewives" among males, or "In school" for persons beyond age 25), in which these persons constitute a small percent of the total age group (see footnote 2).

population reveals similarly significant differences. Of these impaired persons aged 15-24, 36.4 percent were employed as compared with 38.2 percent in the remaining population; 69.1 percent of these persons aged 25-44 were employed as against 82.8 percent in the remaining population, and 59.9 percent of the handicapped persons aged 45-64 were employed as against 76.4 percent employed in the remaining population of the corresponding age.

The impairments interfere also with the employment status of the female population. Of course it is not as serious a problem since the employment of women in general, except in the younger age groups, is less common when no national emergencies exist. Of the incapacitated girls in the younger age group (aged 15-24), only 4.3 percent were employed and 12.0 percent were in school; of the girls having nondisabling impairments 18.1 percent were employed and 29.5 percent were in school, as compared with 29.5 percent employed and 30.1 percent in school of girls of the same age in the remaining population.

These employment restrictions apparently prevail in spite of constant occupational readjustments that undoubtedly take place among the handicapped persons—adjustments which tend to lessen unemployment within their ranks.

## CAUSES OF IMPAIRMENTS

Little needs to be added to what is brought out clearly and in detail in table 6, as to causes of orthopedic impairments. Accidents are about on a par with disease in causing incapacitating impairments among males, and they are the predominant factor in causing non-disabling impairments. Of the incapacitating impairments among males, 43.0 percent were due to accidents, primarily occupational (23.6 percent), and automobile accidents (8.6 percent), and 53.7 percent were due to disease resulting principally from apoplexy and infantile paralysis (39.6 percent). Of the nondisabling impairments among males, 73.3 percent were caused by accidents, with occupational (44.5 percent) and home (13.2 percent) accidents as the leading causes. Infantile paralysis, congenital diseases, and diseases of infancy are the main contributors among the diseases.

TABLE 6.—*Distribution of persons with orthopedic impairments by cause of impairment, classified by disability and sex, 1935-36*

Cause	Males			Females		
	Percent distribution of persons having impairments					
	Incapacitating	Nondisabling	Total	Incapacitating	Nondisabling	Total
All impairments.....	100.0	100.0	100.0	100.0	100.0	100.0
Accidents.....	43.0	73.3	69.6	30.9	43.3	41.1
Occupational.....	23.6	44.5	42.0	2.4	5.1	4.6
Home.....	4.1	13.2	12.1	13.3	24.5	22.6
Public.....	5.5	8.6	8.2	7.2	7.6	7.5
Automobile.....	8.6	5.8	6.1	6.6	5.0	5.3
Unspecified.....	1.2	1.2	1.2	1.4	1.1	1.1
Disease.....	53.7	23.6	27.3	69.0	56.4	58.6
Apoplexy.....	34.7	3.3	6.9	42.9	7.4	13.2
Infantile paralysis.....	4.9	5.2	5.2	8.5	10.9	10.5
Congenital and infancy.....	4.0	4.1	4.1	5.8	8.7	8.2
Rheumatism.....	0.4	2.5	2.3	0.7	10.1	8.6
Tuberculosis.....	0.4	1.4	1.3	0.7	2.1	1.9
Weakness of arches.....	1.1	1.1	1.1	2.2	2.9	2.8
Local infection.....	0.2	0.9	0.8	-----	1.6	1.4
Diabetes.....	-----	0.4	0.4	-----	0.9	0.7
Other, known and unknown diseases.....	8.0	4.7	5.2	8.2	11.8	11.3
Other causes.....	3.3	3.1	3.1	0.1	0.3	0.3
Wounds of war.....	2.8	2.7	2.7	-----	-----	-----
External causes.....	0.5	0.4	0.4	0.1	0.3	0.3

Among the females accidents play the minor part: 30.9 percent of the incapacitating impairments were due to accidents, mainly home accidents, and the remaining incapacitating impairments (69.0 percent) were caused by disease—again apoplexy and infantile paralysis being the principal causes. For nondisabling impairments among females, the responsibility is about equally divided between accident and disease: 43.3 percent were due to accidents, chiefly home accidents, and 56.4 percent were brought about by diseases including



those of congenital origin or of early infancy.<sup>27</sup> From these percentage distributions of impairments by cause (table 6) and the general estimates of persons with orthopedic impairments (tables 2 and 3), general estimates by cause can be readily obtained for the United States as a whole. Such estimates should prove of value in planning preventive measures or a rehabilitation program.

#### TYPES OF IMPAIRMENTS AND PARTS OF BODY AFFECTED

In like manner general knowledge about the type of the impairments is valuable. Two complementary tables are therefore presented (tables 7 and 8). Table 7 distinguishes broadly the impairments by (a) lost members, and (b) crippled or paralyzed members. Table 8 states for each of these groups the parts of the body affected.

Irrespective of age, the incapacitating impairments among males consist almost entirely of crippled or paralyzed members. It is especially true of the younger and the older age groups. Crippled and paralyzed members of the body constituted 95 percent of the incapacitating impairments among males under 15 years of age, and about 94 percent of these impairments among males aged 65 and over. The lowest percentage was found among the 25 to 44 age group (84 percent) followed by that of the 15 to 24 age group (86 percent). Lost members make up on the average about one-tenth of the incapacitating impairments. Nondisabling impairments are about equally divided between lost members and crippled and paralyzed members. No such differences obtain with respect to impairments among females: whether incapacitating or nondisabling, crippled and paralyzed members are the chief type of impairment. This does not mean, however, that the absolute incidence of impairment of crippled or paralyzed members is smaller among the males than among the females. This type of impairment among males is overweighted by the high incidence of lost members, due to occupational accidents.<sup>28</sup>

The parts of the body affected by the impairments are reported in table 8. Fingers or thumbs make up three-fourths of the lost members among males, and two-thirds of the lost members among females. Feet or legs are the chief component of crippled or paralyzed members.

<sup>27</sup> For more details on home accidents as a cause of impairments, see (7).

<sup>28</sup> Total prevalence rates (per 1,000 population of all ages) of orthopedic impairments were 27.9 and 11.6 for males and females, respectively, based on the age distribution of 1940 United States population. Obviously, the total male prevalence rate is about 2.5 times as high as the corresponding female rate. Based on the population of the National Survey, the corresponding rates were 27.2 for males and 11.1 for females (table 9), apparently lower than the respective rates of the total United States. The differences in the total rates are due to the differences in the age distribution of the United States population and that of the Survey population. The Health Survey had a younger (urban) population.



TABLE 7.—*Distribution of persons with orthopedic impairments, by type of impairment and disability, classified by age and sex, 1935-36*

Type of impairment and disability	Percentage distribution for each age group					
	All ages	Under 15	15-24	25-44	45-64	65 and over
<b>MALES</b>						
Incapacitated						
Lost members.....	10.4	4.9	14.4	16.4	10.7	6.2
Crippled or paralyzed members.....	89.6	95.1	85.6	83.6	89.3	93.8
Not-disabled						
Lost members.....	53.3	17.7	39.4	56.5	60.4	49.1
Crippled or paralyzed members.....	46.7	82.3	60.6	43.5	39.6	50.9
All impaired <sup>1</sup>						
Lost members.....	46.7	15.5	36.5	52.8	52.7	37.5
Crippled or paralyzed members.....	53.3	84.5	63.5	47.2	47.3	62.5
<b>FEMALES</b>						
Incapacitated						
Lost members.....	3.5	2.3	3.9	3.8	4.5	2.7
Crippled or paralyzed members.....	96.5	97.7	96.1	96.2	95.5	97.3
Not-disabled						
Lost members.....	19.4	13.0	16.6	25.8	20.8	13.3
Crippled or paralyzed members.....	80.6	87.0	83.4	74.2	79.2	86.7
All impaired <sup>1</sup>						
Lost members.....	15.8	10.8	14.6	22.5	17.0	9.7
Crippled or paralyzed members.....	84.2	89.2	85.4	77.5	83.0	90.3

<sup>1</sup> "All impaired" refers to the total number of persons with orthopedic impairments, whether or not incapacitated.

TABLE 8.—*Distribution of persons with orthopedic impairments, by type of impairment and parts of body affected, classified by sex, 1935-36*

Type of impairment and parts of body affected	Percent distribution	
	Males	Females
All impairments.....	100.0	100.0
Lost members.....	46.7	15.8
Fingers or thumb.....	34.4	10.6
Foot or leg.....	5.6	2.4
Hand or arm.....	3.3	1.2
Toes.....	2.9	1.3
Two or more major members.....	0.6	0.3
Crippled or paralyzed members.....	53.3	84.2
Foot or leg.....	19.6	32.9
Two major members.....	7.2	13.6
Hand or arm.....	7.1	8.5
Fingers or thumb.....	5.0	4.0
Three major members.....	4.4	9.5
Spine or back.....	3.9	6.3
Entire body.....	3.4	6.6
Other trunk.....	2.2	2.3
Toes.....	0.4	0.5

#### RACIAL AND ECONOMIC FACTORS

As revealed by the data (table 9), there are differences in the incidence of orthopedic impairments among white and colored groups.<sup>29</sup> The prevalence rates of incapacitating impairments are on the whole higher among the colored than among the white groups, for both males and females alike. The table shows a rate of 2.94 incapacitating impairments among white males, as against 3.95 among colored males,

<sup>29</sup> "Colored" refers essentially to Negroes, since the latter constituted 95 percent of all "Colored" surveyed by the Health Survey (14).

TABLE 9.—*Prevalence of orthopedic impairments among the white and colored urban population, classified by age and sex, 1935-36*

Age and nature of impairment	Number of cases per 1,000 persons					
	Males			Females		
	Total	White	Colored	Total	White	Colored
<b>Incapacitating impairments</b>						
Under 15.....	0.79	0.80	0.72	0.71	0.77	0.31
15-24.....	1.15	1.09	1.71	0.78	0.78	0.80
25-44.....	1.82	1.72	2.67	0.94	0.85	1.57
45-64.....	5.58	5.25	9.30	2.64	2.41	5.36
65 and over.....	17.82	17.00	30.93	10.50	10.22	14.78
All ages.....	3.04	2.94	3.95	1.76	1.71	2.11
<b>Nondisabling impairments</b>						
Under 15.....	4.94	5.05	4.11	3.44	3.55	2.58
15-24.....	12.20	12.37	10.49	5.64	5.68	5.29
25-44.....	26.36	26.60	24.25	7.56	7.52	7.85
45-64.....	42.90	42.73	44.91	14.85	14.44	19.70
65 and over.....	71.01	70.68	76.27	34.82	34.57	38.71
All ages.....	24.18	24.49	21.20	9.30	9.35	8.80
<b>All impairments<sup>1</sup></b>						
Under 15.....	5.73	5.85	4.83	4.15	4.32	2.89
15-24.....	13.35	13.46	12.20	6.42	6.46	6.09
25-44.....	28.18	28.32	26.92	8.50	8.38	9.42
45-64.....	48.48	47.98	54.21	17.49	16.85	25.06
65 and over.....	88.83	87.68	107.20	45.32	44.79	53.49
All ages.....	27.22	27.44	25.15	11.06	11.07	10.91

<sup>1</sup> "All impairments" refers to incapacitating and nondisabling cases.

and a rate of 1.71 among white females as against 2.11 among colored females. However, there is no intention to imply that these differences are due to some racial (genetic) factors. It might be presumed that the low economic status of this group, which involves bad housing, more hazardous occupations, inadequate medical care for mothers, and poor nutrition in general, is more likely to be accountable for the higher incidence of these impairments. The existence of wide differences in the incidence of impairments among various income groups of the white population, as shown later, seems to bear out such a presumption.

With respect to nondisabling impairments, the colored have lower prevalence rates than the white groups. It is quite possible that the differences are "real" due to occupational differentials prevailing between these groups. It seems, however, more probable that the informants of the colored group might have been less aware of the nondisabling impairments, as long as these were not interfering with the person's occupation or activity. For want of better information on the "colored," these data, though inadequate, fill an undesirable gap in the setting of the problem.

Reference was made previously to the differences in the prevalence rates of impairments among the various income groups. The different rates are presented in table 10 and figure 4, for three income groups.<sup>30</sup>

<sup>30</sup> The income classification was made on the basis of annual family income. Reference must be made here to (14) or (28) for details concerning the meaning of these terms.

TABLE 10.—*Prevalence of orthopedic impairments among the white male and female urban population in the various income classes, 1935-36*

Age and nature of impairment	Number of cases per 1,000 persons in various income classes <sup>1</sup>					
	Males			Females		
	Under \$1,000	\$1,000-\$1,999	\$2,000 and over	Under \$1,000	\$1,000-\$1,999	\$2,000 and over
<b>Incapacitating impairments</b>						
Under 15.....	1.02	0.75	0.41	0.86	0.77	0.62
15-24.....	1.55	0.98	0.68	1.02	0.81	0.47
25-44.....	3.65	0.99	0.66	1.40	0.56	0.84
45-64.....	10.26	3.46	1.85	3.46	2.16	1.56
65 and over.....	24.46	13.32	9.22	11.82	9.92	9.39
All ages.....	5.18	1.95	1.34	2.40	1.44	1.37
<b>Nondisabling impairments</b>						
Under 15.....	6.36	4.06	3.92	4.24	3.02	2.96
15-24.....	15.62	11.15	8.97	7.44	5.00	3.44
25-44.....	40.25	22.37	15.61	11.51	5.90	4.82
45-64.....	62.17	37.07	24.49	21.61	11.31	8.24
65 and over.....	92.35	56.08	42.60	42.82	27.01	24.49
All ages.....	33.76	20.37	15.68	13.22	7.18	6.09
<b>All impairments</b>						
Under 15.....	7.38	4.81	4.33	5.10	3.79	3.58
15-24.....	17.17	12.13	9.65	8.46	5.81	3.91
25-44.....	43.90	23.36	16.27	12.91	6.46	5.66
45-64.....	72.43	40.53	26.34	25.07	13.47	9.80
65 and over.....	116.81	69.40	51.82	54.64	36.93	33.88
All ages.....	38.94	22.32	17.02	15.62	8.62	7.46

<sup>1</sup> Classification by income is based on annual family income.

One may easily note the sharp increase in the prevalence rates of incapacitating as well as nondisabling impairments in proceeding from the higher to the lower income classes. For males, the rates of incapacitating impairments range from 1.34 for the group with \$2,000 or more annual income to 5.18 for the under \$1,000 income class, while the rates for the nondisabling impairments range from 15.68 to 33.76 for these income classes respectively. These differences by income are obviously much larger for the incapacitating than for the nondisabling impairments. For females the rates for incapacitating impairments range from 1.37 to 2.40 and for the nondisabling impairments the rates range from 6.09 to 13.22 within the two extreme income classes.

Differences by income, analogous to those found in the incidence of orthopedic impairments, were found in the incidence of deafness (5) and blindness (6). If one remembers that the bulk of the population belongs to the lower income classes,<sup>31</sup> then the problem of physically handicapped persons presents itself in its full vastness and seriousness.<sup>32</sup>

<sup>31</sup> See tables 1 and 19 (14) on the distribution of the population by income. Of course, the impairments in themselves could be responsible for lowering the income. Whatever the cause and effect relationship might be, the fact still remains that the higher prevalence of impairments is among the lower income groups.

<sup>32</sup> See Lynch (22) on a general discussion of the employment of the physically handicapped persons, Reznikoff (30) on the emotional factors involved in the problem of rehabilitation of such persons, and Bartle (4) on the employment and placement of such persons in industry. Of course, Kessler's book (16) has the widest approach to this problem, even if the statistics that were available to the author were far from being adequate.

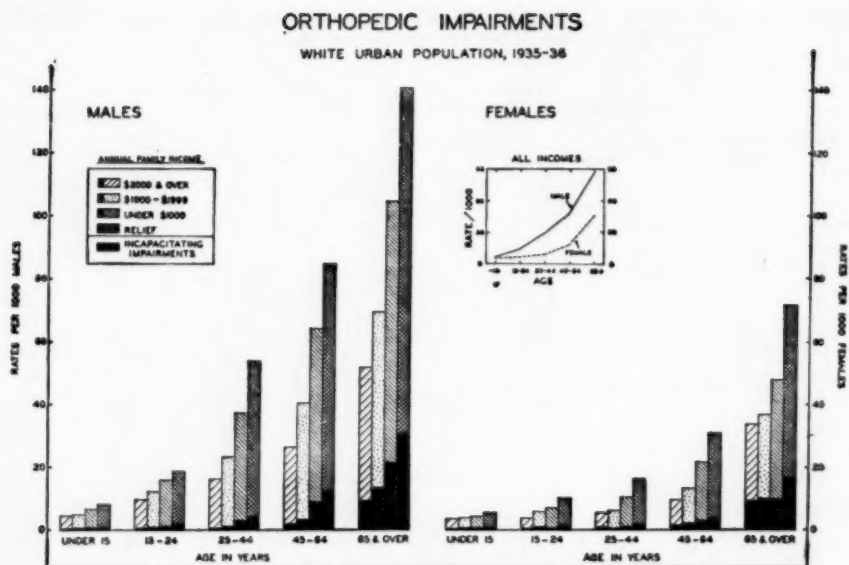


FIGURE 4.—Prevalence rates of incapacitating and nondisabling impairments among the various income classes of the urban population of the United States, 1935-36, by sex and age. (Based on table 10.)

## II.

It was thought desirable, for the sake of a unified picture on the physically handicapped persons, to present combined estimates on the number of persons in the United States that might be found either deaf or blind or having orthopedic impairments.<sup>33</sup> Prevalence rates were, therefore, recomputed for the deaf and the blind based on 5-year age distributions of these defects.<sup>34</sup>

Like the original prevalence rates of the orthopedic impairments, the original quinquennial rates of deafness and blindness were smoothed by applying to them 5-point least square moving averages. The prevalence rates of deafness, blindness, and orthopedic impairments were then combined into two groups: major and minor impairments. The major impairments include (a) incapacitating impairments, (b) total deafness, and (c) blindness in both eyes. The minor impairments comprise (a) nondisabling impairments, (b) partial deafness, and (c) blindness in one eye. The combined prevalence rates, by sex, are plotted in figure 5.

Estimates for the United States population as of 1940, based on these separate prevalence rates, are presented in table 11. The estimates are 356,400 males with major impairments and 2,834,000 with minor impairments; 267,100 females with major impairments, and

<sup>33</sup> For detailed analyses, see Beasley (5) on deafness and Britten (6) on blindness.

<sup>34</sup> The prevalence rates given in the mentioned studies (5) and (6) are by wider age intervals.

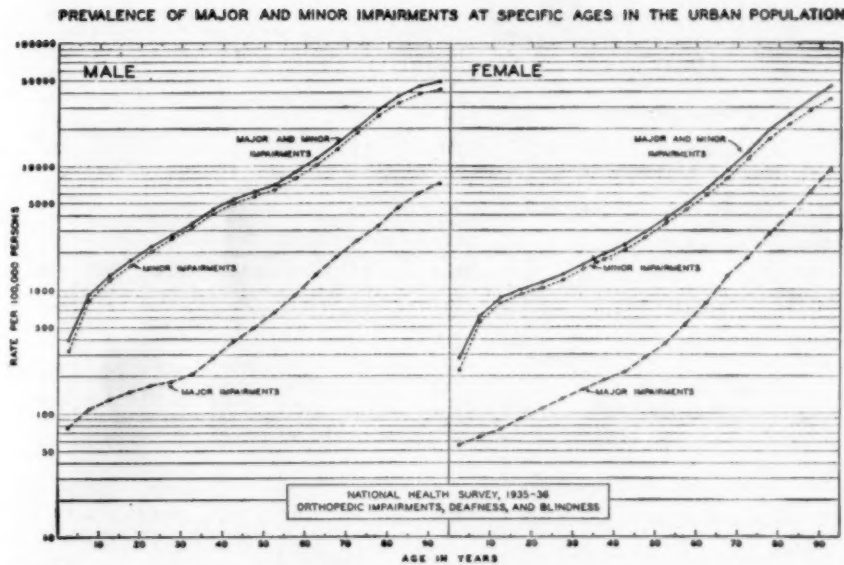


FIGURE 5.—Prevalence rates of major and minor impairments among the urban population in the United States, 1935-36, by age and sex. (Major impairments include incapacitating orthopedic impairments, total deafness, and blindness in both eyes; minor impairments include nondisabling orthopedic impairments, partial deafness, and blindness in one eye.)

1,540,300 with minor impairments. The total estimated number of persons (i. e., both sexes) with major impairments is 623,500, and the number with minor impairments is 4,374,300. These estimates thus reach a total of 5 million persons having either major or minor impairments, even when the defects are limited to orthopedic impairments, deafness, and blindness.

The figures presented here should be regarded only as workable estimates which, no doubt, are being considerably altered by the war economy and by the war itself.

TABLE 11.—Estimated number of persons with major or minor physical impairments among the male and female population of the United States as of 1940<sup>1</sup>

Nature of impairment	Estimated number of persons by age groups, in 1,000's						
	All ages	Under 15	15-24	25-34	35-44	45-64	65 and over
<b>MALES</b>							
Major and minor impairments							
Incapacitating and nondisabling orthopedic impairments	1,844.6	92.9	158.9	236.4	309.3	670.6	376.5
Total or partial deafness	963.3	33.8	47.2	53.0	90.4	275.8	463.1
Blindness in one or both eyes	382.5	17.7	26.6	32.8	48.5	125.7	131.2
Total	3,190.4	144.4	232.7	322.2	448.2	1,072.1	970.8
Major impairments							
Incapacitating orthopedic impairments	208.5	13.2	13.3	14.2	21.4	76.5	69.9
Total deafness	77.1	10.9	10.0	9.6	9.3	16.9	20.4
Blindness in both eyes	70.8	2.6	3.3	4.1	5.8	22.5	32.6
Total	356.4	26.6	26.6	27.9	36.5	115.9	122.9

<sup>1</sup> Based on data from the National Health Survey, 1935-36.

TABLE 11.—*Estimated number of persons with major or minor physical impairments among the male and female population of the United States as of 1940—Con.*

Nature of impairment	Estimated number of persons by age groups, in 1,000's						
	All ages	Under 15	15-24	25-34	35-44	45-64	65 and over
<b>Minor impairments</b>							
Nondisabling orthopedic impairments	1,636.1	79.7	145.6	222.2	287.9	594.1	306.6
Partial deafness	886.2	22.9	37.2	43.4	81.1	258.9	442.7
Blindness in one eye	311.7	15.2	23.3	28.7	42.7	103.2	98.6
Total	2,834.0	117.8	206.1	294.3	411.7	956.2	847.9
<b>FEMALES</b>							
<b>Major and minor impairments</b>							
Incapacitating and nondisabling orthopedic impairments	759.0	66.0	81.0	87.9	86.9	224.4	212.8
Total or partial deafness	833.8	26.6	37.2	57.6	85.9	253.9	372.6
Blindness in one or both eyes	214.6	9.5	11.6	14.1	18.2	59.5	101.7
Total	1,807.4	98.4	129.8	159.6	191.0	537.8	687.1
<b>Major impairments</b>							
Incapacitating orthopedic impairments	132.5	12.5	12.3	12.5	11.6	34.1	49.5
Total deafness	70.9	6.9	8.2	8.6	7.8	17.1	22.4
Blindness in both eyes	63.7	1.5	2.1	2.9	4.0	15.3	37.9
Total	267.1	17.2	22.6	23.9	23.4	66.5	109.8
<b>Minor impairments</b>							
Nondisabling orthopedic impairments	626.5	53.5	68.7	75.4	75.3	190.3	163.3
Partial deafness	762.9	19.7	29.0	49.1	78.1	236.8	350.2
Blindness in one eye	150.9	8.0	9.5	11.2	14.2	44.2	63.8
Total	1,540.3	81.2	107.2	135.7	167.6	471.3	577.3

## III. APPENDIX

TABLE 1.—*Distribution of the urban population of the National Health Survey, and the cases of orthopedic impairments, by sex and age, 1935-36*

Age	Population <sup>1</sup>		Orthopedic impairments (number of cases)			
			Incapacitating		Nondisabling	
	Males	Females	Males	Females	Males	Females
Under 5	89,323	86,369	51	42	215	142
5-9	101,924	100,815	92	88	497	339
10-14	112,075	112,412	96	84	787	549
15-19	105,432	116,773	112	92	999	598
20-24	101,336	123,096	125	94	1,523	754
25-29	102,295	122,125	126	82	1,977	825
30-34	94,690	106,537	137	90	2,160	773
35-39	98,387	108,494	186	105	2,831	827
40-44	93,063	96,141	258	129	3,258	848
45-49	82,959	83,131	313	122	3,041	877
50-54	68,841	68,624	321	175	2,873	932
55-59	49,270	51,770	329	153	2,263	879
60-64	38,530	43,538	371	201	2,085	974
65-69	28,456	33,257	411	227	1,856	895
70-74	18,193	22,596	346	246	1,332	793
75-79	10,764	13,492	237	165	847	592
80-84	4,383	6,329	96	121	345	303
85-89	1,490	2,401	30	49	115	126
90 and over	433	798	14	19	24	34
Unknown	1,079	2,481				
Total	1,202,923	1,301,181	3,651	2,284	29,028	12,060

<sup>1</sup> Taken from a tabulation by the Social Security Board. From these data and the distribution of the orthopedic cases, quinquennial prevalence rates were computed by relating the cases of each age to the corresponding population. The original rates were then smoothed by means of 5-point moving least square averages. The smoothed rates are given in table 1.



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### DEATHS DURING WEEK ENDED OCTOBER 9, 1943

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Oct. 9, 1943	Correspond- ing week, 1942
<b>Data for 87 large cities of the United States:</b>		
Total deaths.....	8,044	8,517
Average for 3 prior years.....	7,915	-----
Total deaths, first 40 weeks of year.....	352,576	325,568
Deaths under 1 year of age.....	582	622
Average for 3 prior years.....	553	-----
Deaths under 1 year of age, first 40 weeks of year.....	25,267	22,274
<b>Data from industrial insurance companies:</b>		
Policies in force.....	65,900,899	65,108,967
Number of death claims.....	10,543	10,802
Death claims per 1,000 policies in force, annual rate.....	8.3	8.7
Death claims per 1,000 policies, first 40 weeks of year, annual rate.....	9.7	9.2

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### REPORTS FROM STATES FOR WEEK ENDED OCTOBER 16, 1943

#### Summary

A total of 484 cases of poliomyelitis was reported for the current week (exclusive of delayed reports of 11 cases), as compared with 515 for the preceding week and 679 for the next earlier week. The cumulative total to date (first 41 weeks of the year) is 10,319, more than 11 percent above the total for the corresponding period of any year since 1931, when 13,615 cases were reported for the same period.

States reporting 12 or more cases for the current week (last week's figures in parentheses) are as follows: *Increases*—Massachusetts 19 (10), Rhode Island 12 (5), Connecticut 16 (10), Michigan 24 (16), Iowa 18 (17), Kansas 31 (23), Texas 21 (15), California 76 (49); *decreases*—New York 35 (52), Illinois 57 (91), Wisconsin 12 (14), Washington 28 (30), Oregon 32 (33); *no change*—Colorado 15 (15).

The incidence of meningococcus meningitis increased sharply, 240 cases being reported for the week, as compared with 191 last week and 192 and 178, respectively, for the next earlier weeks. The 5-year median is 34. States reporting 6 or more cases (last week's figures in parentheses) are as follows: *Increases*—Massachusetts 15 (14), Pennsylvania 20 (11), Ohio 20 (5), Illinois 20 (17), Michigan 19 (11), Missouri 7 (6), Maryland 9 (3), Tennessee 7 (2), and California 17 (6); *decreases*—New York 28 (29), New Jersey 9 (14), Texas 6 (7); *no change*—Virginia 7 (7). The cumulative total for the first 41 weeks of the year is 14,954, more than 50 percent above the total reported for any entire year since the collection of these data was begun. In some of the earlier years, however, fewer States were reported.

Of other diseases included in the following table, the incidence of only measles, scarlet fever, tularemia, and typhus fever is currently above respective figures for the corresponding week last year.

Deaths recorded for the week in 88 large cities of the United States totaled 8,560, as compared with 8,253 last week and a 3-year (1940-42) average of 7,854. The cumulative figure for the first 41 weeks of the year is 369,911, as compared with 341,798 for the same period last year.

*Telegraphic morbidity reports from State health officers for the week ended October 16, 1943, and comparison with corresponding week of 1942 and 5-year median*

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended—		Med-ian 1938-42	Week ended—		Med-ian 1938-42	Week ended—		Med-ian 1938-42	Week ended—		Med-ian 1938-42
	Oct. 16, 1943	Oct. 17, 1942		Oct. 16, 1943	Oct. 17, 1942		Oct. 16, 1943	Oct. 17, 1942		Oct. 16, 1943	Oct. 17, 1942	
NEW ENGLAND												
Maine.....	1	0	1	-----	-----	-----	60	2	4	2	1	0
New Hampshire.....	0	0	0	-----	-----	-----	4	36	1	1	0	0
Vermont.....	0	1	0	-----	-----	-----	15	16	5	0	1	0
Massachusetts.....	5	3	2	-----	-----	-----	74	107	57	15	2	2
Rhode Island.....	0	2	0	-----	-----	-----	18	4	4	3	2	0
Connecticut.....	1	2	1	2	6	6	9	3	9	2	1	0
MIDDLE ATLANTIC												
New York.....	7	18	17	15	16	16	108	66	68	28	5	3
New Jersey.....	4	1	10	5	11	12	80	19	19	9	3	1
Pennsylvania.....	15	8	16	1	-----	-----	39	67	67	20	8	3
EAST NORTH CENTRAL												
Ohio.....	12	18	18	-----	15	9	107	19	19	20	0	1
Indiana.....	9	8	11	5	13	6	49	12	11	4	0	1
Illinois.....	14	20	20	9	7	6	39	11	13	20	7	1
Michigan.....	20	12	10	1	1	1	246	23	36	19	2	2
Wisconsin.....	3	3	1	17	33	27	195	53	53	4	1	1
WEST NORTH CENTRAL												
Minnesota.....	8	5	4	-----	-----	2	183	7	7	0	0	0
Iowa.....	4	1	3	-----	-----	-----	8	11	11	1	0	0
Missouri.....	8	4	7	3	1	1	5	14	14	7	0	0
North Dakota.....	0	1	2	4	5	5	259	0	4	0	0	0
South Dakota.....	2	17	2	-----	-----	-----	4	5	5	0	0	0
Nebraska.....	11	1	1	2	7	1	8	15	4	1	0	0
Kansas.....	1	6	5	2	5	3	5	6	6	0	1	1
SOUTH ATLANTIC												
Delaware.....	0	1	1	-----	-----	-----	1	0	2	2	1	0
Maryland.....	3	7	7	2	8	7	7	4	6	9	0	0
District of Columbia.....	0	0	2	-----	-----	-----	1	1	2	1	2	0
Virginia.....	11	30	37	129	169	106	37	5	11	7	1	1
West Virginia.....	20	11	11	-----	1	9	10	2	2	5	1	0
North Carolina.....	31	78	78	1	1	-----	15	2	32	5	0	0
South Carolina.....	25	37	37	133	263	210	4	6	3	2	0	0
Georgia.....	25	39	45	13	38	16	13	4	4	3	0	0
Florida.....	8	10	8	11	1	1	6	1	1	3	0	0
EAST SOUTH CENTRAL												
Kentucky.....	13	24	20	-----	5	3	19	1	7	5	2	2
Tennessee.....	10	23	23	11	12	8	6	11	11	7	0	1
Alabama.....	32	40	30	38	55	23	11	3	4	1	1	1
Mississippi.....	17	16	17	-----	-----	-----	-----	-----	-----	3	0	0
WEST SOUTH CENTRAL												
Arkansas.....	6	17	17	17	16	14	6	5	5	0	1	1
Louisiana.....	7	14	14	4	3	3	1	0	1	1	0	1
Oklahoma.....	4	10	14	23	25	38	3	1	1	0	0	0
Texas.....	33	78	43	723	507	195	25	33	15	6	2	2
MOUNTAIN												
Montana.....	3	4	3	5	3	3	52	5	17	0	0	0
Idaho.....	0	0	0	-----	3	3	0	14	7	0	0	0
Wyoming.....	0	0	0	3	8	-----	6	7	4	1	0	0
Colorado.....	2	8	9	21	25	25	39	3	6	0	0	0
New Mexico.....	0	6	0	-----	1	-----	0	0	3	0	0	0
Arizona.....	10	1	1	63	47	47	13	13	13	1	0	0
Utah.....	0	0	0	-----	1	1	3	108	7	0	0	0
Nevada.....	0	0	-----	2	1	-----	0	1	-----	0	0	-----
PACIFIC												
Washington.....	3	1	0	-----	3	-----	9	157	18	2	1	0
Oregon.....	1	3	3	6	8	8	11	59	10	3	1	1
California.....	26	24	16	29	32	16	43	38	57	17	2	0
Total.....	415	613	613	1,290	1,346	769	1,876	980	980	240	49	34
41 weeks.....	9,865	10,537	11,215	88,361	87,214	155,313	546,291	471,849	471,849	14,954	2,782	1,645

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended October 16, 1943, and comparison with corresponding week of 1942 and 5-year median—Con.

Division and State	Pollomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever *		
	Week ended—		Median 1938-42	Week ended—		Median 1938-42	Week ended—		Median 1938-42	Week ended—		Median 1938-42
	Oct. 16, 1943	Oct. 17, 1942		Oct. 16, 1943	Oct. 17, 1942		Oct. 16, 1943	Oct. 17, 1942		Oct. 16, 1943	Oct. 17, 1942	
NEW ENGLAND												
Maine.....	0	4	1	16	6	6	0	0	0	2	0	2
New Hampshire.....	1	0	0	1	5	2	0	0	0	0	2	0
Vermont.....	4	0	0	6	8	7	0	0	0	1	0	0
Massachusetts.....	19	2	3	141	128	60	0	0	0	3	12	0
Rhode Island.....	12	0	0	4	2	3	0	0	0	0	1	0
Connecticut.....	16	4	4	24	18	18	0	0	0	0	0	1
MIDDLE ATLANTIC												
New York.....	35	20	20	183	152	121	0	0	0	11	12	14
New Jersey.....	6	14	9	35	43	43	0	0	0	0	1	4
Pennsylvania.....	9	7	13	110	112	112	0	0	0	5	6	14
EAST NORTH CENTRAL												
Ohio.....	7	6	6	189	137	137	0	0	0	5	7	7
Indiana.....	1	5	5	57	80	50	0	1	2	5	2	3
Illinois.....	57	22	22	129	145	145	3	0	0	2	22	17
Michigan <sup>1</sup> .....	24	6	31	75	72	80	1	0	0	3	4	4
Wisconsin.....	12	2	5	110	109	80	0	0	0	0	2	1
WEST NORTH CENTRAL												
Minnesota.....	7	2	19	68	49	53	0	0	0	1	0	0
Iowa.....	18	8	8	72	45	33	0	2	1	1	0	2
Missouri.....	4	1	1	35	44	44	0	0	0	3	3	10
North Dakota.....	1	1	0	6	1	12	0	0	0	0	0	0
South Dakota.....	0	1	1	13	19	13	0	0	0	0	0	0
Nebraska.....	6	15	2	24	25	8	2	0	0	0	0	1
Kansas.....	31	11	6	62	70	62	0	0	0	1	1	2
SOUTH ATLANTIC												
Delaware.....	0	2	0	4	10	8	0	0	0	0	1	1
Maryland <sup>1</sup> .....	2	0	0	24	26	26	0	0	0	5	1	5
District of Columbia.....	0	0	0	17	15	10	0	0	0	0	2	2
Virginia.....	5	3	3	34	57	39	0	0	0	9	13	10
West Virginia.....	0	1	2	84	42	42	0	5	0	9	3	5
North Carolina.....	1	2	2	138	113	82	0	1	0	6	3	9
South Carolina.....	0	2	2	15	12	13	0	0	0	2	2	5
Georgia.....	1	1	1	40	58	42	0	0	0	3	3	8
Florida.....	0	0	1	9	3	6	0	0	0	1	1	1
EAST SOUTH CENTRAL												
Kentucky.....	4	1	6	63	65	62	0	1	0	5	3	15
Tennessee.....	0	5	3	57	98	52	1	0	0	4	6	12
Alabama.....	1	5	3	21	40	32	0	0	0	1	6	3
Mississippi <sup>1</sup> .....	1	1	1	19	12	17	1	0	0	1	2	4
WEST SOUTH CENTRAL												
Arkansas.....	0	3	1	7	23	15	0	3	1	0	7	9
Louisiana.....	1	3	3	10	12	12	0	0	0	3	7	8
Oklahoma.....	11	0	2	17	23	23	0	0	1	11	5	5
Texas.....	21	12	5	32	33	32	0	0	0	9	16	17
MOUNTAIN												
Montana.....	0	1	0	19	8	12	1	0	0	0	0	1
Idaho.....	0	0	0	17	0	12	0	1	0	0	0	0
Wyoming.....	3	0	1	3	1	4	0	0	0	1	1	1
Colorado.....	15	1	1	25	18	18	0	0	0	1	1	4
New Mexico.....	0	0	0	5	2	8	0	0	0	1	8	3
Arizona.....	0	1	1	7	3	3	0	0	0	2	1	1
Utah <sup>1</sup> .....	10	0	2	10	20	8	0	0	0	0	0	0
Nevada.....	2	0	-----	2	0	-----	0	0	-----	0	0	-----
PACIFIC												
Washington.....	28	1	1	53	16	28	0	0	0	1	3	3
Oregon.....	32	0	1	31	4	7	0	0	0	1	0	1
California.....	76	14	10	133	87	87	0	0	0	3	7	7
Total.....	484	190	374	2,256	2,041	1,981	9	14	11	122	176	283
41 weeks.....	10,319	3,214	5,664	108,609	98,478	126,278	644	658	2,046	4,618	5,689	7,929

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended October 16, 1943, and comparison with corresponding week of 1942, and 5-year median—Con.

Division and State	Whooping cough			Week ended Oct. 16, 1943									
	Week ended—		Median 1938-42	Anthrax	Dysentery			Encephalitis, infectious	Leprosy	Rocky Mt. spotted fever	Tularemia	Typhus fever	
	Oct. 16, 1943	Oct. 17, 1942			Amebic	Bacillary	Unspecified						
NEW ENG.													
Maine.....	18	8	8	0	0	0	0	0	0	0	0	0	
New Hampshire.....	0	8	0	0	0	0	0	0	0	0	0	0	
Vermont.....	8	28	19	0	0	0	0	0	0	0	0	0	
Massachusetts.....	61	161	99	0	0	3	0	0	0	0	1	1	
Rhode Island.....	41	22	19	0	0	0	0	0	0	0	0	0	
Connecticut.....	22	65	65	0	0	13	0	0	0	0	0	0	
MID. ATL.													
New York.....	207	352	297	0	2	10	0	3	1	0	0	2	
New Jersey.....	92	202	89	0	1	0	0	0	0	0	0	0	
Pennsylvania.....	171	260	239	1	0	0	0	0	0	0	0	0	
E. NO. CEN.													
Ohio.....	159	139	176	0	0	7	0	0	0	0	0	0	
Indiana.....	12	49	25	0	0	0	0	0	0	1	0	0	
Illinois.....	150	173	176	0	3	9	0	1	0	0	0	0	
Michigan <sup>1</sup> .....	167	210	210	0	0	13	0	0	0	0	0	0	
Wisconsin.....	151	137	139	0	0	0	0	0	0	0	0	0	
W. NO. CEN.													
Minnesota.....	48	41	41	0	0	0	0	0	0	0	0	0	
Iowa.....	40	11	12	0	1	0	0	0	0	0	0	0	
Missouri.....	20	16	16	0	0	0	1	0	0	0	0	0	
North Dakota.....	35	11	13	0	0	0	0	1	0	0	0	0	
South Dakota.....	12	4	4	0	0	0	0	0	0	0	0	0	
Nebraska.....	16	22	5	0	0	0	0	0	0	0	0	0	
Kansas.....	36	22	22	0	1	1	0	0	0	0	1	0	
SO. ATL.													
Delaware.....	0	2	3	0	0	0	0	0	0	0	0	0	
Maryland <sup>2</sup> .....	49	62	36	0	0	0	5	0	0	0	0	0	
Dist. of Col.....	9	0	16	0	0	0	0	0	0	0	0	0	
Virginia.....	59	29	29	0	0	0	82	0	0	0	2	1	
West Virginia.....	11	1	17	0	0	0	0	0	0	0	0	0	
North Carolina.....	150	42	65	0	0	0	0	0	0	0	0	0	
South Carolina.....	25	14	19	0	0	3	0	0	0	0	0	20	
Georgia.....	17	14	10	0	0	1	0	0	0	0	1	48	
Florida.....	23	5	5	0	5	1	3	0	0	0	0	6	
E. SO. CEN.													
Kentucky.....	54	9	37	0	0	6	0	0	0	0	0	0	
Tennessee.....	52	34	32	0	1	0	5	0	0	0	0	6	
Alabama.....	6	15	15	0	0	0	0	0	0	0	0	18	
Mississippi <sup>3</sup> .....				0	0	0	0	0	0	0	1	4	
W. SO. CEN.													
Arkansas.....	9	26	18	0	1	5	0	0	0	0	1	0	
Louisiana.....	1	0	3	0	2	0	0	0	0	0	0	10	
Oklahoma.....	1	3	3	0	0	0	0	0	0	0	0	0	
Texas.....	96	124	52	0	14	180	0	0	0	0	0	34	
MOUNTAIN													
Montana.....	18	53	8	0	0	1	0	0	0	0	3	0	
Idaho.....	0	0	2	0	0	0	0	0	0	0	0	0	
Wyoming.....	8	10	2	0	0	0	0	0	0	0	0	0	
Colorado.....	37	6	19	0	0	0	0	0	0	0	0	0	
New Mexico.....	21	5	7	0	0	3	2	0	0	0	0	0	
Arizona.....	8	1	7	0	0	0	9	0	0	0	0	0	
Utah <sup>4</sup> .....	22	16	16	0	0	0	0	0	0	0	1	0	
Nevada.....	0	0		0	0	1	0	0	0	0	0	0	
PACIFIC													
Washington.....	67	15	15	0	0	0	0	0	0	0	0	0	
Oregon.....	26	12	12	0	0	0	0	0	0	0	0	0	
California.....	122	175	175	0	1	12	0	1	0	0	0	0	
Total.....	2,357	2,614	2,600	1	32	269	107	6	1	1	11	150	
41 weeks.....	152,322	144,350	145,873	51	1,707	13,406	3,457	569	22	421	673	3,349	
41 weeks, 1942.....				68	945	10,348	5,705	457	38	440	739	2,779	

<sup>1</sup> New York City only.

<sup>2</sup> Period ended earlier than Saturday.

<sup>3</sup> Exclusive of delayed reports (included only in cumulative total) as follows: Oklahoma, 5 cases; Colorado, 6 cases.

<sup>4</sup> Including paratyphoid fever cases reported separately as follows: Massachusetts, 3; Michigan, 1; Florida 1; Texas, 2.



## WEEKLY REPORTS FROM CITIES

City reports for week ended October 2, 1943

This table lists the reports from 83 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland	0	0		0	1	0	0	1	6	0	0	2
New Hampshire:												
Concord	0	0		0	0	0	0	0	0	0	0	0
Vermont:												
Barre	0	0		0	0	0	0	0	0	0	0	0
Massachusetts:												
Boston	0	0		0	2	2	9	4	41	0	0	24
Fall River	0	0		0	1	2	0	0	4	0	0	5
Springfield	0	0		0	2	0	0	0	11	0	0	2
Worcester	0	0		0	1	0	6	0	28	0	0	3
Rhode Island:												
Providence	0	0		0	16	1	1	11	1	0	0	123
Connecticut:												
Bridgeport	0	0		0	1	0	0	1	0	0	0	0
Hartford	0	0		0	0	1	1	0	0	0	0	2
New Haven	0	0		0	1	0	0	0	1	0	0	1
MIDDLE ATLANTIC												
New York:												
Buffalo	0	0		0	3	3	3	5	5	0	1	7
New York	11	4	4	0	32	19	44	30	53	0	9	73
Rochester	0	0		0	0	1	4	0	1	0	1	7
Syracuse	0	0		0	0	2	2	1	0	0	1	24
New Jersey:												
Camden	0	0		0	0	0	1	0	0	0	0	1
Newark	2	0		0	0	2	2	0	1	0	0	18
Trenton	0	0	1	0	0	0	1	0	2	0	1	3
Pennsylvania:												
Philadelphia	5	0	1	0	2	4	14	1	14	0	0	41
Pittsburgh	2	0	1	1	13	2	13	2	20	0	1	20
Reading	0	0		0	0	0	0	0	2	0	0	4
EAST NORTH CENTRAL												
Ohio:												
Cincinnati	1	0		0	4	0	0	3	16	0	0	7
Cleveland	0	0	2	1	4	6	7	0	30	0	2	23
Columbus	0	0		0	0	0	2	0	11	0	0	12
Indiana:												
Fort Wayne	0	2		0	0	0	2	0	0	0	0	0
Indianapolis	1	0		2	0	0	12	0	13	0	1	18
South Bend	0	0		0	2	0	0	0	1	0	0	0
Terre Haute	0	0		0	0	0	0	0	0	0	0	0
Illinois:												
Chicago	7	0		0	10	6	28	51	21	0	0	54
Springfield	0	0		0	0	1	0	0	4	0	0	1
Michigan:												
Detroit	1	0		1	12	4	9	4	26	0	3	23
Flint	0	0		0	0	1	0	0	6	0	0	8
Grand Rapids	0	0		0	1	0	0	1	0	0	0	6
Wisconsin:												
Kenosha	0	0		0	0	0	0	0	1	0	0	0
Milwaukee	0	0		0	6	1	4	2	24	0	0	71
Racine	0	0		0	1	0	0	0	1	0	0	15
Superior	1	0		0	2	0	0	0	0	0	0	1
WEST NORTH CENTRAL												
Minnesota:												
Minneapolis	3	0		2	7	3	4	4	11	0	0	7
St. Paul	2	0		0	8	0	1	0	5	0	0	15
Missouri:												
St. Joseph	0	0		0	0	1	0	0	11	0	0	0
St. Louis	1	0	1	0	3	1	3	3	6	0	0	10

## City reports for week ended October 2, 1943—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Polio myelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
Nebraska:												
Omaha.....	0	0	-----	0	3	0	0	4	3	0	0	1
Kansas:												
Wichita.....	0	0	-----	0	0	0	3	3	2	0	0	3
SOUTH ATLANTIC												
Delaware:												
Wilmington.....	0	0	-----	0	6	2	0	0	1	0	0	5
Maryland:												
Baltimore.....	2	0	2	2	1	3	9	1	6	0	1	57
Cumberland.....	0	0	-----	0	0	0	1	0	0	0	0	0
Frederick.....	0	0	-----	0	0	0	0	0	0	0	0	0
District of Columbia:												
Washington.....	0	0	-----	0	1	2	6	1	10	0	1	9
Virginia:												
Lynchburg.....	0	0	-----	0	11	0	1	0	2	0	0	20
Richmond.....	0	0	-----	0	1	1	0	1	7	0	0	4
Roanoke.....	0	0	-----	0	0	0	3	0	2	0	0	1
West Virginia:												
Charleston.....	0	0	-----	0	1	0	0	0	1	0	0	6
Wheeling.....	0	0	-----	0	0	0	1	0	0	0	0	6
North Carolina:												
Winston-Salem.....	0	0	-----	0	0	0	2	0	2	0	0	7
South Carolina:												
Charleston.....	0	0	-----	1	0	0	1	0	0	0	0	1
Georgia:												
Atlanta.....	1	0	6	0	0	0	1	0	2	0	0	1
Brunswick.....	0	0	-----	0	0	0	0	0	1	0	0	1
Savannah.....	0	0	-----	0	0	0	2	0	0	0	0	1
Florida:												
Tampa.....	2	0	-----	0	0	0	0	0	0	0	0	1
EAST SOUTH CENTRAL												
Tennessee:												
Memphis.....	0	0	-----	0	0	0	3	0	3	0	2	8
Nashville.....	1	0	-----	0	0	0	2	0	1	0	0	1
Alabama:												
Birmingham.....	0	0	1	0	0	0	4	1	4	0	1	0
Mobile.....	1	0	-----	0	0	0	1	0	1	0	1	0
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock.....	0	0	-----	0	0	0	1	0	0	0	0	3
Louisiana:												
New Orleans.....	1	0	-----	1	1	2	6	1	2	0	0	3
Shreveport.....	0	0	-----	0	0	0	2	0	0	0	1	0
Texas:												
Dallas.....	1	0	-----	0	0	0	2	2	1	0	0	5
Galveston.....	0	0	-----	0	0	0	1	0	0	0	0	0
Houston.....	4	0	-----	0	0	0	2	4	0	0	0	1
San Antonio.....	2	0	1	1	0	0	5	1	1	0	0	4
MOUNTAIN												
Montana:												
Billings.....	0	0	-----	0	1	0	0	0	0	0	0	1
Helena.....	0	0	-----	0	0	0	0	0	2	0	0	0
Missoula.....	0	0	-----	0	0	0	0	0	1	0	0	0
Idaho:												
Boise.....	0	0	-----	0	0	0	0	0	0	0	0	0
Colorado:												
Denver.....	3	0	4	1	2	2	1	5	2	0	0	21
Pueblo.....	0	0	-----	0	2	0	0	1	3	0	0	0
Utah:												
Salt Lake City.....	0	0	-----	0	1	0	0	5	4	0	0	2

## City reports for week ended October 2, 1943—Continued

	Diphtheria cases	Encephalitis, Infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
PACIFIC												
Washington:												
Seattle.....	0	0	-----	0	2	1	2	4	3	0	0	14
Spokane.....	0	0	1	0	7	0	3	0	2	0	0	6
Tacoma.....	1	0	0	0	0	0	1	3	3	0	0	20
California:												
Los Angeles.....	1	0	2	0	18	7	3	11	16	0	0	5
Sacramento.....	0	0	-----	0	1	0	2	4	1	0	0	4
San Francisco.....	1	0	1	0	14	1	8	6	9	0	0	14
Total.....	58	6	28	13	235	84	252	182	480	0	27	857
Corresponding week, 1942.....	72	4	52	20	150	18	252	48	399	0	27	892
Average, 1938-42.....	81	-----	53	11	173	-----	248	-----	360	1	43	1,065

*Anthrax*.—Cases: Philadelphia, 1.

*Dysentery, amebic*.—Cases: Boston, 5; New York, 1; Rochester, 1.

*Dysentery, bacillary*.—Cases: Buffalo, 18; New York, 8; Rochester, 1; Syracuse, 2; Chicago, 3; St. Louis, 5; Baltimore, 5; Richmond, 1; Charleston, S. C., 9; Atlanta, 1; Nashville, 2; Los Angeles, 5.

*Dysentery, unspecified*.—Cases: Baltimore, 3; Richmond, 5; San Antonio, 3.

*Leprosy*.—Cases: Dallas, 1.

*Rocky Mountain spotted fever*.—Cases: Nashville, 1.

*Typhus fever*.—Cases: Charleston, S. C., 1; Atlanta, 3; Savannah, 6; Birmingham, 3; Dallas, 1.

<sup>1</sup> 3-year average, 1940-42.

<sup>2</sup> 5-year median.

Rates (annual basis) per 100,000 population, by geographic groups, for the 83 cities in the preceding table (estimated population, 1942, 54,061,100)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Pollomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England.....	0.0	0.0	0.0	0.0	62.1	14.9	42.2	42.2	228.6	0.0	0.0	402
Middle Atlantic.....	8.9	1.8	3.1	0.4	22.3	14.7	37.5	17.4	45.9	0.0	6.2	88
East North Central.....	6.4	1.2	1.2	2.3	40.3	11.1	37.4	35.6	89.9	0.0	3.5	140
West North Central.....	15.1	0.0	2.5	5.0	52.7	12.6	27.6	35.1	95.4	0.0	0.0	90
South Atlantic.....	8.7	0.0	13.9	5.2	36.4	13.9	46.9	5.2	59.0	0.0	3.5	191
East South Central.....	11.9	0.0	5.9	0.0	0.0	0.0	59.4	5.9	53.5	0.0	23.8	53
West South Central.....	23.5	0.0	2.9	5.9	2.9	5.9	55.7	23.5	11.7	0.0	2.9	47
Mountain.....	25.2	0.0	33.6	8.4	50.4	16.8	8.4	92.5	100.9	0.0	0.0	202
Pacific.....	5.2	0.0	7.0	0.0	73.4	15.7	33.2	48.9	59.4	0.0	0.0	285
<b>Total.....</b>	<b>8.9</b>	<b>0.9</b>	<b>4.3</b>	<b>2.0</b>	<b>36.0</b>	<b>12.9</b>	<b>38.6</b>	<b>27.9</b>	<b>73.5</b>	<b>0.0</b>	<b>4.1</b>	<b>131</b>

## PLAGUE INFECTION IN CALIFORNIA, MONTANA, AND WYOMING

Plague infection has been reported proved in pools of fleas from rodents collected in California, Montana, and Wyoming on the dates given as follows:

## CALIFORNIA

*Eldorado County*.—August 27, 1943, 12 fleas from 6 golden mantled ground squirrels taken one-half mile south of Camp Richardson, Lake Tahoe, 30 fleas from 4 ground squirrels, *C. beecheyi*, from the same location, and 19 fleas from 19 chipmunks taken 2 miles north of Tallac.

*San Diego County.*—August 27, 200 fleas from 15 ground squirrels, *C. fisheri*, taken at Lake Henshaw, and 2 pools, each of 200 fleas from 20 ground squirrels, same species, taken from the Cuyamaca State Park at Cuyamaca and from a ranch approximately 31 miles south of Julian.

*Santa Clara County.*—August 31, 200 fleas from 5 ground squirrels, *C. beecheyi*, taken from property near Mayfield, 1¼ miles south of Highway No. 101.

## MONTANA

*Custer County.*—September 22, 17 fleas from 20 prairie dogs, *Cynomys ludovicianus*, taken from a ranch 21 miles south of Miles City near Highway No. 212.

## WYOMING

*Johnson County.*—September 21, 50 fleas from 50 prairie dogs, *Cynomys ludovicianus*, and 56 fleas from 25 prairie dogs, same species, taken on Powder River on ranches 17 and 12 miles, respectively, south of Arvada; September 22, 120 fleas from 75 prairie dogs, *Cynomys ludovicianus*, taken from a ranch 13 miles southwest of Arvada.

## TERRITORIES AND POSSESSIONS

## Hawaii Territory

*Honolulu—Dengue fever.*—A report dated October 10, 1943, states that up to this date a total of 404 cases of dengue fever have occurred in Honolulu, Hawaii Territory.

## Panama Canal Zone

*Notifiable diseases—July 1943.*—During the month of July 1943, certain notifiable diseases were reported in the Panama Canal Zone and terminal cities as follows:

Disease	Panama		Colon		Canal Zone		Outside the Zone and terminal cities		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chickenpox.....	10		1		9		11		31	
Diphtheria <sup>1</sup> .....	13	1	2				2		17	1
Dysentery (amebic).....	3	1			2		5		10	1
Dysentery (bacillary).....					2		3		5	
Leprosy.....			1						1	
Malaria <sup>2</sup> .....	7				192		78	1	277	1
Measles.....	3				8				11	
Mumps.....	47	1	14		81		8		150	1
Paratyphoid fever.....							1		1	
Pneumonia.....		7		3	12	3		2	<sup>3</sup> 12	15
Poliomyelitis.....							1		1	
Scarlet fever.....			1						1	
Tuberculosis.....		24		8	7	3		8	<sup>2</sup> 7	43
Typhoid fever.....							2		2	
Whooping cough.....					2			1	<sup>2</sup> 2	1

<sup>1</sup> Exclusive of carriers.<sup>2</sup> 84 recurrent cases.<sup>3</sup> Cases reported in the Canal Zone only.

## FOREIGN REPORTS

### CANADA

*Provinces—Communicable diseases—Week ended September 18, 1943.*—During the week ended September 18, 1943, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox.....		11	7	31	37	4	15	8	34	147
Diphtheria.....		16	5	16	1	2		3		43
Dysentery (bacillary).....				2						2
Encephalitis (infectious).....						1				1
German measles.....				3	4		2	3	2	14
Influenza.....		9	4		11				3	27
Measles.....		4	2	98	47	13	10	22	13	209
Meningitis, meningococcus.....					7		1		1	9
Mumps.....		5		4	56	23	3	9	40	140
Poliomylitis.....			1	1	12	1				19
Scarlet fever.....			5	77	46	18	15	13	14	192
Tuberculosis (all forms).....	2	1	6	157	54	11			20	251
Typhoid and paratyphoid fever.....			1	13	3		1	2	1	21
Whooping cough.....		1		83	135	20	10	31	37	317

### CUBA

*Habana—Communicable diseases—4 weeks ended August 21, 1943.*—During the 4 weeks ended August 21, 1943, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Diphtheria.....	47	2	Scarlet fever.....	2	
Malaria.....	5	1	Tuberculosis.....	11	1
Measles.....	6		Typhoid.....	32	8

*Provinces—Notifiable diseases—4 weeks ended September 11, 1943.*—During the 4 weeks ended September 11, 1943, cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana <sup>1</sup>	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer.....	2	2	1	1	1	10	17
Chickenpox.....			1			1	2
Diphtheria.....	1	35	1			4	42
Leprosy.....		2		2	1	2	7
Lethargic encephalitis.....		1					1
Malaria.....		5	21	27	6	84	171
Measles.....	28	8				1	9
Scarlet fever.....		3					3
Tuberculosis.....	9	17	11	48	7	44	136
Typhoid fever.....	12	83	12	51	31	41	230
Yaws.....						1	1

<sup>1</sup> Includes the city of Habana.

## GREAT BRITAIN

*England and Wales—Infectious diseases—Years 1940, 1941, and 1942—Comparative.*—During the years 1940, 1941, and 1942 cases of certain infectious diseases were reported in England and Wales as follows:

Disease	Cases (including non-civilians)			Disease	Cases (including non-civilians)		
	1940	1941	1942		1940	1941	1942
Cerebrospinal fever.....	12, 771	11, 077	6, 029	Poliomyelitis.....	951	876	581
Diphtheria (including croup).....	46, 281	50, 797	41, 404	Puerperal pyrexia and puerperal sepsis.....	7, 627	7, 356	8, 542
Dysentery.....	2, 860	6, 670	7, 296	Relapsing fever.....	10	6	3
Erysipelas.....	13, 123	12, 237	11, 598	Scarlet fever.....	65, 320	59, 432	85, 084
Lethargic encephalitis.....	211	187	148	Smallpox.....	1	—	7
Malaria.....	2	2	2	Tuberculosis.....	46, 572	50, 964	52, 619
Measles.....	409, 521	409, 715	286, 341	Typhoid and paratyphoid fever.....	2, 833	4, 763	858
Ophthalmia neonatorum.....	4, 390	4, 195	4, 516	Whooping cough.....	53, 607	173, 331	66, 016
Pneumonia <sup>1</sup> .....	47, 875	50, 942	42, 698				
Polioencephalitis.....	128	83	93				

<sup>1</sup> Includes influenza with pneumonic complications.

*England and Wales—Vital statistics—Years 1940, 1941, and 1942—Comparative.*—The following table shows the numbers of births and deaths with rates per 1,000 population in England and Wales for the years 1940, 1941, and 1942, and are provisional:

	1940		1941		1942	
	Number	Rate per 1,000 population	Number	Rate per 1,000 population	Number	Rate per 1,000 population
Live births.....	607, 029	14. 6	587, 228	14. 2	654, 039	15. 8
Deaths, all causes.....	581, 537	14. 0	535, 180	12. 9	480, 137	11. 6
Maternal deaths.....	1, 640	<sup>1</sup> 2. 6	1, 678	<sup>1</sup> 2. 8	1, 673	<sup>1</sup> 2. 5
Infant mortality.....	33, 892	<sup>2</sup> 56	34, 550	<sup>2</sup> 59	32, 257	<sup>2</sup> 49
Deaths from:						
Cancer.....	68, 922	1. 662	69, 227	1. 670	70, 409	1. 698
Cerebrospinal fever.....	2, 584	. 062	2, 163	. 052	1, 206	. 029
Diarrhea and enteritis.....	4, 433	. 107	4, 654	. 112	4, 927	. 119
Diphtheria.....	2, 480	. 060	2, 641	. 064	1, 828	. 044
Dysentery.....	185	. 004	329	. 008	198	. 005
Erysipelas.....	214	. 005	190	. 005	141	. 003
Influenza.....	11, 482	. 277	6, 901	. 166	3, 401	. 182
Lethargic encephalitis.....	729	. 018	704	. 017	590	. 014
Malaria.....	46	. 001	19	. 000	20	. 000
Measles.....	867	. 021	1, 145	. 028	458	. 011
Ophthalmia neonatorum.....	7	. 000	4	. 000	4	. 000
Pneumonia.....	29, 195	. 704	26, 418	. 637	20, 831	. 502
Polioencephalitis.....	54	. 001	47	. 001	50	. 001
Poliomyelitis.....	107	. 003	113	. 003	84	. 002
Puerperal pyrexia and puerperal sepsis.....	339	. 008	288	. 007	283	. 007
Relapsing fever.....	1	. 000	—	—	—	—
Scarlet fever.....	154	. 004	133	. 004	103	. 003
Tuberculosis.....	28, 144	. 679	28, 670	. 692	25, 547	. 616
Typhoid and paratyphoid fever.....	135	. 003	148	. 004	89	. 002
Whooping cough.....	678	. 016	2, 383	. 057	799	. 019

<sup>1</sup> Per 1,000 total births.

<sup>2</sup> Per 1,000 live births.



## JAMAICA

*Notifiable diseases—4 weeks ended September 25, 1943.*—During the 4 weeks ended September 25, 1943, cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Chickenpox.....	2	11	Puerperal fever.....		2
Diphtheria.....	3	9	Scarlet fever.....		1
Dysentery.....		3	Tuberculosis.....	36	74
Erysipelas.....		2	Typhoid fever.....	8	64
Leprosy.....		4	Typhus fever.....	8	

### REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual prevalence, only those places are included which had not previously reported any of the above-named diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.

A cumulative table showing the reported prevalence of these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday of each month.

(Few reports are available from the invaded countries of Europe and other nations in war zones.)

#### Plague

*Indochina—Cochinchina.*—During the period August 21–31, 1943, 2 cases of plague were reported in Cochinchina, Indochina.

*Madagascar.*—For the period July 1 to August 19, 1943, 2 cases of plague with 2 deaths were reported in Madagascar.

*Morocco (French).*—During the month of August 1943, 5 cases of plague were reported in Marrakech and 1 case of plague was reported in Casablanca, French Morocco.

#### Smallpox

*Algeria.*—For the period September 1–10, 1943, 62 cases of smallpox were reported in Algeria.

*Indochina.*—For the period August 21–31, 1943, 48 cases of smallpox were reported in Indochina.

*Morocco (French).*—For the month of August 1943, 60 cases of smallpox were reported in French Morocco.

#### Typhus Fever

*Algeria.*—During the period September 1–10, 1943, 34 cases of typhus fever were reported in Algeria.

*Morocco (French).*—For the month of August 1943, 155 cases of typhus fever were reported in French Morocco.

*Rumania.*—For the period September 24–30, 1943, 23 cases of typhus fever were reported in Rumania.

*Slovakia.*—During the week ended September 18, 1943, 12 cases of typhus fever were reported in Slovakia.

#### Yellow Fever

*Dahomey—Natitingou.*—On August 28, 1943, 1 suspected case of yellow fever was reported in Natitingou, Dahomey.

## COURT DECISION ON PUBLIC HEALTH

*Venereal disease—exposing another person to.*—(Oklahoma Criminal Court of Appeals; *Ex parte Brown*, 139 P.2d 196; decided June 16, 1943.) A habeas corpus proceeding was instituted by the petitioner to secure her release from the State penitentiary. She had been sentenced to imprisonment on a plea of guilty to the crime of exposing a person by the act of sexual intercourse to a venereal disease. The applicable Oklahoma statute made it a felony for any person "after becoming an infected person and before being discharged and pronounced cured by a reputable physician in writing" to "expose any other person by the act of copulation or sexual intercourse to such venereal disease or to liability to contract the same." The information against the petitioner under such statute stated that the petitioner, "being infected with a venereal disease, did \* \* \* expose" a person to such disease.

The question presented to the Oklahoma Criminal Court of Appeals was whether the information should also have alleged that the petitioner had not been discharged and pronounced cured by a reputable physician in writing. The court said that an almost insurmountable burden would be created if it should hold that the State had to prove such an allegation. The State would not possess the information as to who had been administering treatment to the accused or whether she had even been treated. "The prosecution surely would not be required to bring all of the doctors in the community to court to inquire whether they had discharged the patient as cured." It was apparent to it, continued the court, that the provision was inserted as a matter of defense which may be interposed by an accused. The State had to prove beyond a reasonable doubt that the accused had become infected with a venereal disease and that subsequently thereto had exposed another person by some of the means set forth in the statute.

The court's view was that the information against the petitioner was sufficient to allege a violation of the statute and that a commitment on a plea of guilty to such information was sufficient authority for holding the petitioner. The petition for writ of habeas corpus was denied.

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